

RECEIVED  
CENTRAL FAX CENTER

APR 20 2006

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0851-00xx  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) CS23289RL	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>April 20, 2006</u> Signature <u><i>June Edwards</i></u> Typed or printed name <u>June Edwards</u>		Application Number <u>10/775,987</u>	Filed <u>February 10, 2004</u>
		First Named Inventor <u>Arneson, et al.</u>	
		Art Unit <u>2612</u>	Examiner <u>Jenkins, Kimberly Y.</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>39,633</u> <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		<u><i>Sylvia Chen</i></u> 20 APR 2006 Signature <u>Sylvia Chen</u> Typed or printed name <u>847-523-1096</u> Telephone number <u>20 APR 2006</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> Total of <u>1</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.8. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**RECEIVED  
CENTRAL FAX CENTER****UNITED STATES PATENT AND TRADEMARK OFFICE****APR 20 2006**

APPLICANT: ARNESON, ET AL. ART UNIT: 2612  
APPLN. NO.: 10/775,987 EXAMINER: JENKINS, KIMBERLY YVETTE  
FILED: FEBRUARY 10, 2004 DOCKET NO.: CS2Q3289RL  
TITLE: ELECTRONIC DEVICE WITH FORCE SENSING KEY

**REMARKS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicant respectfully submits that the Examiner's November 30, 2005 Final Office Action and March 27, 2006 Advisory Action omits one or more essential elements needed for a prima facie rejection as well as contains a clear error because one or more limitations are not met by the cited references. Independent claims 1, 29, and 31 stand rejected under 35 U.S.C. § 103(a) over US 5,541,622 (Engle) in view of US 6,441,753 (Montgomery). Independent claims 11 and 36 stand rejected under 35 U.S.C. § 103(a) over US 5,541,622 (Engle) in view of US 6,441,753 (Montgomery) and US 6,377,685 (Krishnan).

The claimed subject matter involves a key 200 for an electronic device having a switch 280 with a popple dome 225, at least two force sensing regions 290, and a processor for determining a selected function for the key 200 based upon the first force value and the second force value when the switch 280 is activated. See FIGs. 2-3 and independent claims 1, 29, and 31.

Applicant has continually and consistently stressed the difference between the rubber dome of Engle (col. 5 lines 51-54), which does not provide tactile feedback (col. 4 lines 11-23), and the popple dome of claim 1, which provides tactile feedback. See for example paragraph [0022] on page 5 of the originally-filed specification ("The [popple]

Application No. 10/775,987  
April 20, 2006  
Page 2 of 4

Docket No. CS23289RL - ARNESON, ET AL.

dome 225 helps protect against inadvertent key presses and also provides tactile feedback when a key press has activated the central switch 280."), paragraph [0025] on pages 5-6 ("The hard plastic actuator 270 also provides for a clean snap of the popple dome to provide tactile feedback to a user."), and paragraph [0030] on page 7 ("The popple dome 225 has a triangular shape raised high off the substrate 210 that provides tactile feedback due to a large dome travel distance during activation."). Note also other literature that describes popple domes as tactile metal domes for switches (e.g., <http://www.snaptron.com> and <http://www.nicomatic.com>). Thus, one of ordinary skill in the art would not consider a rubber dome of Engle to be equivalent to a popple dome as recited in claim 1.

Not only that, but all four embodiments of Engle teach away from a popple dome by stressing that a user should not be aware of a switch closing (col. 7 lines 28-43, col. 8 lines 17-46, col. 9 lines 1-23, and col. 9 lines 23-50).

Although Montgomery shows popple domes in FIG. 12, it would not have been obvious to combine Engle and Montgomery to replace the rubber dome of Engle with a popple dome from Montgomery because this would contradict the teachings of Engle. This same argument applies to claims 29 and 31. Thus, the Examiner's November 30, 2005 Final Office Action and March 27, 2006 Advisory Action contain clear error because Engle and Montgomery cannot be combined in the manner suggested by the Examiner, and thus one or more limitations of claims 1, 29, and 31 are not met by the cited references.

Regarding independent claim 11, the Examiner incorrectly states in the November 30, 2005 Final Office Action that Engle discloses a "a second actuator for the second central switch, the second actuator having a first side adapted for receiving an externally applied force, and a plurality of contact surfaces on a second side, the plurality of contact surfaces on the second side corresponding to the second central switch and one or more associated satellite force sensing pads, wherein the second

Application No. 10/775,987  
April 20, 2006  
Page 3 of 4

Docket No. CS23289RL - ARNESON, ET AL.

actuator has multiple actuations, each actuation being distinguishable by an evaluation of the forces sensed by the one or more associated satellite force sensing pads" as recited in claim 11. In the March 27, 2006 Advisory Action, the Examiner mentions that Engle discloses additional actuators in col. 5 lines 44-45. Applicant reads col. 5 lines 44-45 to suggest that the joystick of Engle need not be part of a keyboard but can simply be a stand-alone joystick (such as is common for electronic games). Engle does not suggest additional actuators (i.e., multiple joysticks) with each actuator having its own central switch and associated satellite force sensing pads.

Because neither Montgomery nor Krishnan addresses this shortcoming of Engle, the Examiner's November 30, 2005 Final Office Action and March 27, 2006 Advisory Action omits one or more essential elements needed for a prima facie rejection of claim 11.

Regarding independent claim 36, none of Engle, Montgomery, or Krishnan (alone or in a permitted combination) show or suggest a switch with a popple dome, four force sensing regions, and a processor for determining a selected function for the key based upon the force values of the four force sensing regions when the switch is activated. See the previous argument with respect to claim 1 and 31.

### Conclusion

Reconsideration and withdrawal of the rejection of independent claims 1, 11, 29, 31, and 36 under 35 U.S.C. § 103(a) as being obvious in view of any combination of Engle, Montgomery, and Krishnan is respectfully requested. Because the independent claims are not properly rejected, the rejection of the dependent claims should also be withdrawn.

Application No. 10/775,987  
April 20, 2006  
Page 4 of 4

Docket No. CS23289RL - ARNESON, ET AL.

S U M M A R Y

The application is in condition for allowance and a favorable response at an early date is earnestly solicited. Should the Examiner have any questions, comments, or suggestions, the Examiner is invited to contact Applicants' representative at the telephone number indicated below.

Should the Examiner have any questions, comments, or suggestions, the Examiner is invited to contact Applicants' representative at the telephone number indicated below.

Please charge any fees associated herewith, including extension of time fees, to Deposit Account 502117.

Respectfully submitted,

Please send correspondence to:  
Motorola, Inc.  
Intellectual Property Dept. (SYC)  
600 North U.S. Highway 45, AN475  
Libertyville, IL 60048  
Customer Number: 20280

By: Sylvia Chen 20APR2006 Date  
Sylvia Chen  
Attorney for Applicants  
Registration No. 39,633  
Tel. No. (847) 523-1096  
Fax No. (847) 523-2350  
Email: [Sylvia.Chen@motorola.com](mailto:Sylvia.Chen@motorola.com)